

1/20 534 Rec'd PCT/PTC 14 JUL 2000

SEQUENCE LISTING

<110> HSC RESEARCH AND DEVELOPMENT LIMITED PARTNERSHIP

<120> HUMAN LYMPHOID PROTEIN TYROSINE PHOSPHATASES

<130> 3206-165

<140> PCT/CA99/00038

<141> 1999-01-18

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<170> PatentIn Ver. 2.0

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12/20

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 Arg Gln Ser Thr Lys Tyr Lys Ala Asp Lys Thr Tyr Pro Thr Thr Val
 35 40 45
 Ala Glu Asn Ala Lys Asn Ile Lys Lys Asn Arg Tyr Lys Asp Ile Leu

14/20

50 55 60
 Pro Tyr Asp Tyr Ser Arg Val Glu Leu Ser Leu Ile Thr Ser Asp Glu
 65 70 75 80
 Asp Ser Ser Tyr Ile Asn Ala Asn Phe Ile Lys Gly Val Tyr Gly Pro
 85 90 95
 Lys Ala Tyr Ile Ala Thr Gln Gly Pro Leu Ser Thr Thr Leu Leu Asp
 100 105 110
 Phe Trp Arg Met Ile Trp Glu Tyr Ser Val Leu Ile Ile Val Met Ala
 115 120 125
 Cys Met Glu Tyr Glu Met Gly Lys Lys Lys Cys Glu Arg Tyr Trp Ala
 130 135 140
 Glu Pro Gly Glu Met Gln Leu Glu Phe Gly Pro Phe Ser Val Ser Cys
 145 150 155 160
 Glu Ala Glu Lys Arg Lys Ser Asp Tyr Ile Ile Arg Thr Leu Lys Val
 165 170 175
 Lys Phe Asn Ser Glu Thr Arg Thr Ile Tyr Gln Phe His Tyr Lys Asn
 180 185 190
 Trp Pro Asp His Asp Val Pro Ser Ser Ile Asp Pro Ile Leu Glu Leu
 195 200 205
 Ile Trp Asp Val Arg Cys Tyr Gln Glu Asp Asp Ser Val Pro Ile Cys
 210 215 220
 Ile His Cys Ser Ala Gly Cys Gly Arg Thr Gly Val Ile Cys Ala Ile
 225 230 235 240
 Val Asp Tyr Thr Trp Met Leu Leu Lys Asp Gly Ile Ile Pro Glu Asn
 245 250 255
 Phe Ser Val Phe Ser Leu Ile Arg Glu Met Arg Thr Gln Arg Pro Ser
 260 265 270
 Leu Val Gln Thr Gln Glu Gln Tyr Glu Leu Val Tyr Asn Ala Val Leu
 275 280 285
 Glu Leu Phe Lys Arg Gln Met Asp Val Ile Arg Asp Lys His Ser Gly
 290 295 300
 Thr Glu Ser Gln Ala Lys His Cys Ile Pro Glu Lys Asn His Thr Leu

15/20

305 310 315 320
 Gln Ala Asp Ser Tyr Ser Pro Asn Leu Pro Lys Ser Thr Thr Lys Ala
 325 330 335
 Ala Lys Met Met Asn Gln Gln Arg Thr Lys Met Glu Ile Lys Glu Ser
 340 345 350
 Ser Ser Phe Asp Phe Arg Thr Ser Glu Ile Ser Ala Lys Glu Glu Leu
 355 360 365
 Val Leu His Pro Ala Lys Ser Ser Thr Ser Phe Asp Phe Leu Glu Leu
 370 375 380
 Asn Tyr Ser Phe Asp Lys Asn Ala Asp Thr Thr Met Lys Trp Gln Thr
 385 390 395 400
 Lys Ala Phe Pro Ile Val Gly Glu Pro Leu Gln Lys His Gln Ser Leu
 405 410 415
 Asp Leu Gly Ser Leu Leu Phe Glu Gly Cys Ser Asn Ser Lys Pro Val
 420 425 430
 Asn Ala Ala Gly Arg Tyr Phe Asn Ser Lys Val Pro Ile Thr Arg Thr
 435 440 445
 Lys Ser Thr Pro Phe Glu Leu Ile Gln Gln Arg Glu Thr Lys Glu Val
 450 455 460
 Asp Ser Lys Glu Asn Phe Ser Tyr Leu Glu Ser Gln Pro His Asp Ser
 465 470 475 480
 Cys Phe Val Glu Met Gln Ala Gln Lys Val Met His Val Ser Ser Ala
 485 490 495
 Glu Leu Asn Tyr Ser Leu Pro Tyr Asp Ser Lys His Gln Ile Arg Asn
 500 505 510
 Ala Ser Asn Val Lys His His Asp Ser Ser Ala Leu Gly Val Tyr Ser
 515 520 525
 Tyr Ile Pro Leu Val Glu Asn Pro Tyr Phe Ser Ser Trp Pro Pro Ser
 530 535 540
 Gly Thr Ser Ser Lys Met Ser Leu Asp Leu Pro Glu Lys Gln Asp Gly
 545 550 555 560
 Thr Val Phe Pro Ser Ser Leu Leu Pro Thr Ser Ser Thr Ser Leu Phe

16/20

565

570

575

Ser Tyr Tyr Asn Ser His Ser Ser Leu Ser Leu Asn Ser Pro Thr Asn
 580 585 590

Ile Ser Ser Leu Leu Asn Gln Glu Ser Ala Val Leu Ala Thr Ala Pro
 595 600 605

Arg Ile Asp Asp Glu Ile Pro Pro Pro Leu Pro Val Arg Thr Pro Glu
 610 615 620

Ser Phe Ile Val Val Glu Glu Ala Gly Glu Phe Ser Pro Asn Val Pro
 625 630 635 640

Lys Ser Leu Ser Ser Ala Val Lys Val Lys Ile Gly Thr Ser Leu Glu
 645 650 655

Trp Gly Gly Thr Ser Glu Pro Lys Lys Phe Asp Asp Ser Val Ile Leu
 660 665 670

Arg Pro Ser Lys Ser Val Lys Leu Arg Ser Pro Lys Ser Gly Lys Asn
 675 680 685

Phe Ser Trp Leu
 690

<210> 5

<211> 802

<212> PRT

<213> Mus musculus

<400> 5

Met Asp Gln Arg Glu Ile Leu Gln Gln Leu Leu Lys Glu Ala Gln Lys
 1 5 10 15

Lys Lys Leu Asn Ser Glu Glu Phe Ala Ser Glu Phe Leu Lys Leu Lys
 20 25 30

Arg Gln Ser Thr Lys Tyr Lys Ala Asp Lys Ile Tyr Pro Thr Thr Val
 35 40 45

Ala Gln Arg Pro Lys Asn Ile Lys Lys Asn Arg Tyr Lys Asp Ile Leu
 50 55 60

Pro Tyr Asp His Ser Leu Val Glu Leu Ser Leu Leu Thr Ser Asp Glu
 65 70 75 80

17/20

Asp Ser Ser Tyr Ile Asn Ala Ser Phe Ile Lys Gly Val Tyr Gly Pro
 85 90 95

Lys Ala Tyr Ile Ala Thr Gln Gly Pro Leu Ser Thr Thr Leu Leu Asp
 100 105 110

Phe Trp Arg Met Ile Trp Glu Tyr Arg Ile Leu Val Ile Val Met Ala
 115 120 125

Cys Met Glu Phe Glu Met Gly Lys Lys Lys Cys Glu Arg Tyr Trp Ala
 130 135 140

Glu Pro Gly Glu Thr Gln Leu Gln Phe Gly Pro Phe Ser Ile Ser Cys
 145 150 155 160

Glu Ala Glu Lys Lys Lys Ser Asp Tyr Lys Ile Arg Thr Leu Lys Ala
 165 170 175

Lys Phe Asn Asn Glu Thr Arg Ile Ile Tyr Gln Phe His Tyr Lys Asn
 180 185 190

Trp Pro Asp His Asp Val Pro Ser Ser Ile Asp Pro Ile Leu Gln Leu
 195 200 205

Ile Trp Asp Met Arg Cys Tyr Gln Glu Asp Asp Cys Val Pro Ile Cys
 210 215 220

Ile His Cys Ser Ala Gly Cys Gly Arg Thr Gly Val Ile Cys Ala Val
 225 230 235 240

Asp Tyr Thr Trp Met Leu Leu Lys Asp Gly Ile Ile Pro Lys Asn Phe
 245 250 255

Ser Val Phe Asn Leu Ile Gln Glu Met Arg Thr Gln Arg Pro Ser Leu
 260 265 270

Val Gln Thr Gln Glu Gln Tyr Glu Leu Val Tyr Ser Ala Val Leu Glu
 275 280 285

Leu Phe Lys Arg His Met Asp Val Ile Ser Asp Asn His Leu Gly Arg
 290 295 300

Glu Ile Gln Ala Gln Cys Ser Ile Pro Glu Gln Ser Leu Thr Val Glu
 305 310 315 320

Ala Asp Ser Cys Pro Leu Asp Leu Pro Lys Asn Ala Met Arg Asp Val
 325 330 335

18/20

Lys Thr Thr Asn Gln His Ser Lys Gln Gly Ala Glu Ala Glu Ser Thr
 340 345 350

Gly Gly Ser Ser Leu Gly Leu Arg Thr Ser Thr Met Asn Ala Glu Glu
 355 360 365

Glu Leu Val Leu His Ser Ala Lys Ser Ser Pro Ser Phe Asn Cys Leu
 370 375 380

Glu Leu Asn Cys Gly Cys Asn Asn Lys Ala Val Ile Thr Arg Asn Gly
 385 390 395 400

Gln Ala Arg Ala Ser Pro Val Val Gly Glu Pro Leu Gln Lys Tyr Gln
 405 410 415

Ser Leu Asp Phe Gly Ser Met Leu Phe Gly Ser Cys Pro Ser Ala Leu
 420 425 430

Pro Ile Asn Thr Ala Asp Arg Tyr His Asn Ser Lys Gly Pro Val Lys
 435 440 445

Arg Thr Lys Ser Thr Pro Phe Glu Leu Ile Gln Gln Arg Lys Thr Asn
 450 455 460

Asp Ieu Ala Val Gly Asp Gly Phe Ser Cys Leu Glu Ser Gln Leu His
 465 470 475 480

Glu His Tyr Ser Leu Arg Glu Leu Gln Val Gln Arg Val Ala His Val
 485 490 495

Ser Ser Glu Glu Leu Asn Tyr Ser Leu Pro Gly Ala Cys Asp Ala Ser
 500 505 510

Cys Val Pro Arg His Ser Pro Gly Ala Leu Arg Val His Leu Tyr Thr
 515 520 525

Ser Leu Ala Glu Asp Pro Tyr Phe Ser Ser Ser Pro Pro Asn Ser Ala
 530 535 540

Asp Ser Lys Met Ser Phe Asp Leu Pro Glu Lys Gln Asp Gly Ala Thr
 545 550 555 560

Ser Pro Gly Ala Leu Leu Pro Ala Ser Ser Thr Thr Ser Phe Phe Tyr
 565 570 575

Ser Asn Pro His Asp Ser Leu Val Met Asn Thr Leu Thr Ser Phe Ser
 580 585 590

19/20

Pro Pro Leu Asn Gln Glu Thr Ala Val Glu Ala Pro Ser Arg Arg Thr
595 600 605

Asp Asp Glu Ile Pro Pro Pro Leu Pro Glu Arg Thr Pro Glu Ser Phe
610 615 620

Ile Val Val Glu Glu Ala Gly Glu Pro Ser Pro Arg Val Thr Glu Ser
625 630 635 640

Leu Pro Leu Val Val Thr Phe Gly Ala Ser Pro Glu Cys Ser Gly Thr
645 650 655

Ser Glu Met Lys Ser His Asp Ser Val Gly Phe Thr Pro Ser Lys Asn
660 665 670

Val Lys Leu Arg Ser Pro Lys Ser Asp Arg His Gln Asp Gly Ser Pro
675 680 685

Pro Pro Pro Leu Pro Glu Arg Thr Leu Glu Ser Phe Phe Leu Ala Asp
690 695 700

Glu Asp Cys Ile Gln Ala Gln Ala Val Gln Thr Ser Ser Thr Ser Tyr
705 710 715 720

Pro Glu Thr Thr Glu Asn Ser Thr Ser Ser Lys Gln Thr Leu Arg Thr
725 730 735

Pro Gly Lys Ser Phe Thr Arg Ser Lys Ser Leu Lys Ile Phe Arg Asn
740 745 750

Met Lys Lys Ser Val Cys Asn Ser Ser Ser Pro Ser Lys Pro Thr Glu
755 760 765

Arg Val Gln Pro Lys Asn Ser Ser Ser Phe Leu Asn Phe Gly Phe Gly
770 775 780

Asn Arg Phe Ser Lys Pro Lys Gly Pro Arg Asn Pro Pro Ser Ala Trp
785 790 795 800

Asn Met

<210> 6

<211> 82

<212> DNA

<213> Homo sapiens

20/20

<400> 6

aaactccgaa gtcctaaatc aggtaaaaat ttctcttggc tttgatgac atttagccct 60

aagattggaa gaatggttcg tt

82

<210> 7

<211> 14

<212> PRT

<213> Homo sapiens

<400> 7

Lys Leu Arg Ser Pro Lys Ser Gly Lys Asn Phe Ser Trp Leu

1

5

10

009260 8920360